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Use of kangri (a traditional firepot) as a weapon

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ABSTRACT

Kangri an earthenware firepot has been traditionally used by people of Kashmir for protecting themselves for harsh winter weather. This study done on patients admitted in the burns ward and general emergency ward of a tertiary care hospital, is perhaps the first of its kind. It analyses the use of this very traditional and useful art form as a weapon that can cause significant damage during interpersonal conflicts. As is clear from the study its use as weapon can inflict considerable damage and can lead to lifelong disabilities. Out of the 20 cases studied over a period of one year 2 cases received grievous injuries over head and face region in form of permanent disfigurement. Almost half of the injuries i.e. 7 cases were mechanical in nature whereas rest 13 cases belong to thermal category. Most of the injuries were simple and healed with preliminary medical attention but in 2 cases there was permanent disfigurement and both were because of deep burns.

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1. Introduction

The Kangri is a type of brazier, an indigenous firepot, worn by people in the Kashmir Valley of the Indian subcontinent, in between thighs and abdomen to generate warmth especially during the colder winter months.[1,2] Also known as kanger, kangar or kangir, it consists of a willow wicker with an inner clay pot in which hot embers are kept. It is exclusive to Kashmiri culture and is also considered as a work of art.[3] It is usually placed inside a cloak type traditional Kashmiri garment known as pheran or phiren.[4] It is about 6 inches (150 mm) in diameter and the temperature reaches about 150 °F (66 °C)[5,6] (Fig. 1).

Kangri cancer is a type of squamous-cell carcinoma of skin, of the lower abdomen and inner thighs, found only in Kashmir, associated with constant exposure to heat. Though first described in 1860s, cases are still being reported. Another condition, associated with prolonged use of the Kangri, is erythema ab igne, a reticulate hypermelanosis with erythema[6–11].

Due to the hot ambers, the Kangri is an effective weapon of offence during domestic fights or interpersonal violence. They are used, like Molotov cocktails and petrol bombs, by miscreants to attack their rivals. The injuries vary from simple abrasions, bruises or superficial burns to grade III burns leading to permanent scarring and disfigurement.[12–14] (Fig. 2) Historically, firepots with embers or burning tar have been used as weapons by soldiers and pirates. Recently in USA there have been reports of deaths and injuries due to table top ceramic firepots.[15,16]

2. Material and methods

The study involved collection of data from inpatient burns wards and emergency ward of our tertiary care hospital, regarding patients with history of assault injuries from Kangri. The data collected included demographics, location, types and nature of injury.

3. Observations and discussion

Over the period of 1 year, 23 cases were recorded. Three cases were excluded as there was ambiguity in the history.

Most of the cases (18/20 = 90%) occurred during winter and only 2 cases (10%) were observed in spring. This is in concurrence with the usage pattern of Kangri which peaks during winter and ebbs during spring.

Majority of victims were males (13/20 = 65%) which is similar to assaults with conventional weapons like sticks, sharp weapons, firearms etc where males predominate.[17–22] The females, though being more vulnerable to domestic violence.[23,24]

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Fig. 1. Kangri showing inner earthen pot containing hot embers, coal and ash; which is surrounded by fine crafted basket like covering made of fine twigs of special tree.

Fig. 2. A victim of Kangri assault showing extensive facial burns.

Table 1
Regional distribution of injuries.

Body part affected	Males		Females		Total	
	No.	%	No.	%	No.	%
Head	3	23.1%	1	14.3%	4	20.0%
Face	4	30.8%	3	42.9%	7	35.0%
Neck	0	–	1	14.3%	1	5.0%
Chest	4	30.8%	2	28.6%	6	30.0%
Abdomen	2	15.4%	0	–	2	10.0%
Limbs	0	–	0	–	0	–
Pelvis	0	–	0	–	0	–
Total	13	65.0%	7	35.0%	20	100.0%

Rural areas reported bulk of the cases (18/20 = 90%); as urban areas have modern warming equipment like electric heaters, gas or liquid fuel based internal heating systems and rely less on this cheap indigenous heating method. Urban houses also have a traditional but costlier, Kashmiri 'Hammam'; a heated room with a hollow base for burning firewood, with a supply of hot water through a copper tank 'Khazane'.

As obvious, the commonly affected part of the body is face (7 cases, 35%) followed by chest (6 cases, 30%) and head (4 cases, 20%) (Table 1). Several studies on assault cases have reported that face and head are the prime target because of their vulnerability and importance.[25–29] The rest of the body especially the upper or lower limbs received negligible or no injury at all. This is in contrast to other conventional assault cases where injuries to upper limbs predominate.[22,30,31] More females (42.9%) had facial involvement as compared to males (30.8%), as there may be intention to disfigure the female. In contrast to this, the involvement of head was more in males (23.1%) as compared to females (14.3%).

Only about a third (7 cases, 35%) of the cases were exclusively mechanical (abrasions, bruises and lacerations); whereas two-thirds (13 cases, 65%) had thermal injuries. 4 cases (20%) comprised of people who suffered mixed types of injuries i.e. both mechanical and thermal. Burns were present exclusively in 9 cases (45%). More females (6 cases, 85.7%) suffered burn injuries as compared to males (7 cases, 53.8%) (Table 2).

Medico-legally, 18 cases (90%) had simple injuries and only 2 cases (10%) received injuries that were grievous hurt (Table 3). Both the cases of grievous hurt had deep burns, on face and head, which healed with permanent scarring and disfigurement, correctable only with modern plastic surgery techniques like tissue grafting etc.

A "Kangri battle", an assault involving Kangri as weapon, typically involves throwing of the entire apparatus with full force towards the opponent, generally directed towards the face or the upper torso. Injuries result from direct impact of Kangri or by dispersion of its contents i.e. hot embers. In the former group, injuries vary from simple abrasions or bruises to deep contusions and lacerations; resulting from the Kangri impact itself or due to sharp broken pieces of the clay-pot. The latter group consists of dry

Table 2
Profile by type of injuries.

Type of injury	Males		Females		Total	
	No.	%	No.	%	No.	%
Abrasions	3	23.1%	0	–	3	15.0%
Bruises	2	15.4%	1	14.3%	3	15.0%
Lacerations	1	7.7%	0	–	1	5.0%
Superficial Burns	4	30.8%	3	42.9%	7	35.0%
Deep Burns	1	7.7%	1	14.3%	2	10.0%
Mixed	2	15.4%	2	28.6%	4	20.0%
Total	13	65.0%	7	35.0%	20	100.0%

Table 3
Medicolegal profile of injuries.

Nature of injury	Males		Females		Total	
	No.	%	No.	%	No.	%
Simple Injury	12	92.3%	6	85.7%	18	90.0%
Grievous Injury	1	7.7%	1	14.3%	2	10.0%
Total	13	65.0%	7	35.0%	20	100.0%

thermal burns, varying from completely healing reversible superficial burns to the more extensive non-healing irreversible epidermo-dermal or dermal burns; leading to disfigurement, scarring or contractures.

4. Conclusion

Kangri which is a traditional warming device, for the people of Kashmir during frigid cold winters, has a potential of being used as a weapon. Most of the cases report in winters, with majority of the victims being male. Face, chest and head are the commonly involved body parts; the injuries being mechanical or thermal. Just like the cancerous condition known as 'Kangri cancer' in medical parlance[6–9]; this injury can been given a separate term as 'Kangri injury' in forensic literature, especially because of its exclusiveness in having both thermal as well as mechanical content associated with it.

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Conflict of interest
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